

Abstract

An SINR estimating unit (301) of a receiver apparatus (32) measures first and second demodulated signals (y_1, y_2) to calculate SINR (ratio of signal power to sum of interference power and noise power) for each signal sequence. A transmission parameter deciding unit (111) decides, based on the SINR, a transmission parameter (X_{next}) used by a transmitter apparatus (31) for controlling the transmission for each signal sequence, and then feeds the decided transmission parameter back to the transmitter apparatus (31). First and second mapping units (201-1, 201-2) of the transmitter apparatus (31) controls, based on the transmission parameters (X_{eff}) as fed back, the modulation level for each signal sequence.